Lighting Units, Feeder Pillars and associated ducting Design Risk Assessment.

DFL Designers have, in accordance with CDM regulations, identified site-specific hazards/risks that are not normally associated with these types of works, endeavoured to eliminate or reduce these hazards/risks for construction, maintenance, and decommissioning of the Lighting Units, Feeder Pillars and associated ducting, as far as reasonably practicable. All works should be carried out by qualified and competent persons in accordance with, but not limited to, G39 Working in the Vicinity of DNO Equipment, Working at height regulations, electricity at work regulations, safe digging practices hsg47 Avoiding danger from underground services and Code of Practice for Electrical Safety in Highway Electrical Operations.

Applies to: Design, Installation, maintenance and de-commissioning of Lighting Units, Feeder Pillars and associated ducting.

DRA01

Client	**Tony Gee**	**SCHEME**	**BRT-TG-XX-ZZ-RA-LI-0001-S3_P01**	**Assessed By**	**A Elliott**	**Date**	**04.05.2021**
				Checked By	**G Harding**	**Date**	**06.05.2021**
				Approved By	**A Longman**	**Date**	**06.05.2021**

Legend - Major Site specific, Safety, Health and Environmental Hazards –

Will any of the following hazards affect Main Contractor/Sub Contractor, client's staff, general public or affect the environment?

Use "Risk Rating"(RR) matrix to assess each hazard and indicate level of risk i.e.;

L = 1- 4, M = 5 – 10, H = 15 - 30 or **VH** = **50**, in space next to each hazard.

Risk Rating (RR) Matrix - Indicate L, M, H, or VH in box.

L = Likelihood, Multiply by S = Severity, for Risk Rating (RR).

1 Unlikely to be affected.
2 May be affected.
3 Occasionally affected.
5 Likely to be affected.

1 Minor First Aid Injury Only.
2 Hospital Treatment & Off Work.
5 Some Disability - Long absence.
10 Permanent Disability/Death.

Hazards/Risk, Identified. (Safety, Health & Environmental).	`At Risk			Assessment of risk before Design.			Actions taken at the Design Stage, to identify site-specific Hazards/Risks, eliminate or reduce these Hazards/Risks for Construction, Maintenance, and Decommissioning of the Lighting Units, Feeder Pillars and associated ducting, as far as reasonably practicable.	Assessment of risk after design.			Addendum sheet required?	
	Main Contractor / Sub C	Users	Environ /ment.	L	S	RR		L	S	RR	NO	YES (See addendum sheet).
Electrical Sub Stations in the vicinity.	✓		✓	3	10	H	**Lighting Units, Feeder Pillars and associated ducting have been designed away from Electrical Sub Stations.** **Relevant Electrical Sub Stations have been indicated on this scheme's drawing.**	1	10	M		**(See HV/LV network maps).**

Lighting Units, Feeder Pillars and associated ducting Design Risk Assessment.

Client	Tony Gee	SCHEME	BRT-TG-XX-ZZ-RA-LI-0001-S3_P01	Assessed By	A Elliott	Date	04.05.2021
				Checked By	G Harding	Date	06.05.2021
				Approved By	A Longman	Date	06.05.2021

Hazards/Risk, Identified. (Safety, Health & Environmental).	`At Risk			Assessment of risk before Design.			Actions taken at the Design Stage, to identify site-specific Hazards/Risks, eliminate or reduce these Hazards/Risks for Construction, Maintenance, and Decommissioning of the Lighting Units, Feeder Pillars and associated ducting, as far as reasonably practicable.	Assessment of risk after design.			Addendum sheet required?	
	Main Contractor / Sub C	Users	Environ /ment.	L	S	RR		L	S	RR	NO	YES (See addendum sheet).
Underground High Voltage Electricity Cables (HV) in the vicinity.	✓			3	10	H	Lighting Units, Feeder Pillars and associated ducting have been designed away from Underground HV Cables. The presence of Underground High Voltage Cables has been noted on this scheme's drawing.	1	10	M		(See HV network maps).
Underground Low Voltage Electricity Cables (LV) in the vicinity.	✓			3	10	H	Lighting Units, Feeder Pillars and associated ducting have been designed close to LV Cables where reasonably practicable, for power supply in order to minimise excavation and associated hazards/risks.	1	10	M		(See LV network maps).
Passive Safe Equipment.		✓		3	10	H	Passive Safety Flowchart Technical Report 30 (TR30) has been used within the design stage. However due to the road characteristics and following the guidance from TR30, Passive Safe Equipment would be non-beneficial due to *risk of secondary impact*.	1	10	M	✓	
Water Environment in the vicinity.	✓		✓	3	10	H	Lighting Units, Feeder Pillars and associated ducting have been designed away from the Water Environment. Relevant Water Environment has been highlighted on this scheme's drawing.	1	10	M	✓	

Lighting Units, Feeder Pillars and associated ducting Design Risk Assessment.

Client	**Tony Gee**	**SCHEME**	**BRT-TG-XX-ZZ-RA-LI-0001-S3_P01**	**Assessed By**	**A Elliott**	**Date**	**04.05.2021**
				Checked By	**G Harding**	**Date**	**06.05.2021**
				Approved By	**A Longman**	**Date**	**06.05.2021**

Hazards/Risk, Identified. (Safety, Health & Environmental).	`At Risk			Assessment of risk before Design.			Actions taken at the Design Stage, to identify site-specific Hazards/Risks, eliminate or reduce these Hazards/Risks for Construction, Maintenance, and Decommissioning of the Lighting Units, Feeder Pillars and associated ducting, as far as reasonably practicable.	Assessment of risk after design.			Addendum sheet required?	
	Main Contractor / Sub C	Users	Environ /ment.	L	S	RR		L	S	RR	NO	YES (See addendum sheet).
Visual impact / light pollution / intrusion.		✓	✓	1	2	L	**Wherever reasonably practicable Lighting Units have been designed to be in keeping with the road characteristics, reduce light pollution, glare and light intrusion.**	1	1	L	✓	

Prepared by: PAS	Uncontrolled if printed. Document Owner: Paul Southcombe.		*Rev: 05*
Approved by: A Longman	Approval Date: 11th January 2016.	Issue Date: 11th January 2016.	Review Date: 1st Jan 2020

Legend - Major Site specific, Safety, Health and Environmental Hazards –

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2 May be affected.	**2 Hospital Treatment & Off Work.**
3 Occasionally affected.	**5 Some Disability - Long absence.**
5 Likely to be affected.	**10 Permanent Disability/Death.**

Declaration: I the undersigned have read and understood the hazards / risks identified in this Scheme's Design Risk Assessment.

Construction Manager (sign): **(Print):** **Date:** / /